

Applicant : James R. Cole et al.
Patent No. : n/a
Issued : n/a
Serial No. : 10/629,065
Filed : 07/28/2003
Page : 2

Attorney's Docket No.: 200208981-1
Alt. Ref.: 00116-001100000

In the claims:

Please amend claims 1, 9, 17, 28, 29, 30, 31 and 32 as indicated below:

1. (Currently Amended)A method of controlling a digital projector, comprising:

receiving a request to turn on the digital projector;

receiving temperature data associated with a light source from a temperature sensor;

comparing the temperature data to a predetermined threshold;

turning on a cooling device and keeping the light source off if the temperature data is
above the predetermined threshold and if a turn-on request has been received; and

turning on the light source if the temperature data is at or below the predetermined
threshold and if a turn-on request has been received.
2. (original)The method of claim 1 wherein the digital projector is selected from a set of
projectors including: an overhead projector, a video projector, a projection television, and a
cinema projector.
3. (original)The method of claim 1 wherein the light-source is selected from a set of
lamps including xenon lamp and a high-pressure mercury vapor lamp.

Applicant : James R. Cole et al.
Patent No. : n/a
Issued : n/a
Serial No. : 10/629,065
Filed : 07/28/2003
Page : 3

Attorney's Docket No.: 200208981-1
Alt. Ref.: 00116-001100000

4. (original)The method of claim 1 wherein the predetermined threshold is substantially the boiling point of mercury.

5. (original)The method of claim 1 wherein the turn-on request received is from an on/off control mounted on the digital projector.

6. (original)The method of claim 1 wherein the turn-on request received from a remote control.

7. (original)The method of claim 1 wherein the received temperature data comprises data taken in proximity to the light source.

8. (original)The method of claim 1 wherein the received temperature data comprises data taken from the internal environment of the digital projector.

9. (Currently Amended) A method of controlling a digital projector, comprising:

turning on a cooling device and keeping the light source off if the temperature data is above the predetermined threshold and if a turn-on request has been received;

turning on the light source if the temperature data is at or below the predetermined threshold and if a turn-on request has been received;

displaying images with the digital projector using a light-source;

receiving a request to turn off the digital projector;

Applicant : James R. Cole et al.
Patent No. : n/a
Issued : n/a
Serial No. : 10/629,065
Filed : 07/28/2003
Page : 4

Attorney's Docket No.: 200208981-1
Alt. Ref.: 00116-001100000

turning off the light-source in response to the request received; and

turning off a cooling device in response to the request and within a substantially immediate time frame without consideration of the light-source temperature.

10. (cancelled)

11. (original)The method of claim 9 wherein the digital projector is selected from a set of projectors including: an overhead projector, a video projector, a projection television, and a cinema projector.

12. (original)The method of claim 9 further comprising:

cooling the light-source passively upon receiving the turn-off request.

13. (original)The method of claim 9 wherein the light-source is a high-pressure mercury vapor lamp.

14. (original)The method of claim 9 wherein the turn-off request received is from an on/off control mounted on the digital projector.

15. (original)The method of claim 9 wherein the turn-off request received from a remote control.

16. (original)The method of claim 9 wherein the cooling device is a fan.

Applicant : James R. Cole et al.
 Patent No. : n/a
 Issued : n/a
 Serial No. : 10/629,065
 Filed : 07/28/2003
 Page : 5

Attorney's Docket No.: 200208981-1
 Alt. Ref.: 00116-001100000

17. (Currently Amended)A light source control apparatus for a digital projector, comprising:

a light source for the projection of images;

a temperature sensor for measuring the temperature of the light source;

a cooling device for lowering the temperature of the light source below a temperature threshold before the light source is activated;

an on/off control to [activate] request activation of the light source and request the light source to be turned off; and

a control mechanism for processing temperature data and determining light source control and cooling device control, wherein the light source is activated when below a temperature threshold.

18. (original)The apparatus of claim 17 wherein the cooling device is turned on if the temperature data is above the predetermined threshold and if a turn-on request has been received; and

turning on the light source if the temperature data is at or below the predetermined threshold and if a turn-on request has been received.

19. (original)The apparatus of claim 17 wherein the turning off the light-source in response to the request received; and

Applicant : James R. Cole et al.
Patent No. : n/a
Issued : n/a
Serial No. : 10/629,065
Filed : 07/28/2003
Page : 6

Attorney's Docket No.: 200208981-1
Alt. Ref.: 00116-001100000

turning off a cooling device in response to the request and within a time frame without consideration of the light-source temperature.

20. (original)The apparatus of claim 17 wherein a light source comprises a high-pressure mercury vapor lamp.

21. (original)The apparatus of claim 17 wherein a temperature sensor comprises a resistive sensor.

22. (original)The apparatus of claim 17 wherein a temperature sensor comprises a silicon PN-junction sensor.

23. (original)The apparatus of claim 17 wherein a temperature sensor is mounted in proximity to the light source.

24. (original)The apparatus of claim 17 wherein a temperature sensor is mounted within the body of the digital projector.

25. (original)The apparatus of claim 17 wherein a cooling device comprises a fan.

26. (original)The apparatus of claim 17 wherein a on/off control comprises a switch mounted on the digital projector.

27. (original)The apparatus of claim 17 wherein an on/off control comprises a remote control.

Applicant : James R. Cole et al.
Patent No. : n/a
Issued : n/a
Serial No. : 10/629,065
Filed : 07/28/2003
Page : 7

Attorney's Docket No.: 200208981-1
Alt. Ref.: 00116-001100000

28. (Currently Amended) The apparatus of claim 17 wherein the control mechanism further [a system controller] comprises a computer system[[,]] integrated into the digital projector having [[,]] a central processing unit, random access memory, mass storage, and access to an external network.

29. (Currently Amended)An apparatus for controlling a digital projector, comprising:

means for receiving a request to turn on the digital projector;

means for receiving temperature data associated with a light source from a temperature sensor;

means for comparing the temperature data to a predetermined threshold;

means for turning on a cooling device and keeping the light source off if the temperature data is above the predetermined threshold and if a turn-on request has been received;
and

means for turning on the light source if the temperature data is at or below the predetermined threshold and if a turn-on request has been received.

30. (Currently Amended) An apparatus for controlling a digital projector, comprising:

means for turning on a cooling device and keeping the light source off if the temperature data is above the predetermined threshold and if a turn-on request has been received;

Applicant : James R. Cole et al.
Patent No. : n/a
Issued : n/a
Serial No. : 10/629,065
Filed : 07/28/2003
Page : 8

Attorney's Docket No.: 200208981-1
Alt. Ref.: 00116-001100000

means for turning on the light source if the temperature data is at or below the predetermined threshold and if a turn-on request has been received;

means for displaying images with the digital projector using a light-source;

means for receiving a request to turn off the digital projector;

means for turning off the light-source in response to the request received; and

means for turning off a cooling device in response to the request and within a substantially immediate time frame without consideration of the light-source temperature.

31. (Currently Amended)A computer program product for controlling a digital projector, tangibly stored on a computer-readable medium, comprising instructions operable to cause a programmable processor to:

receive a request to turn on the digital projector;

receive temperature data associated with a light source from a temperature sensor;

compare the temperature data to a predetermined threshold;

turn on a cooling device and keeping the light source off if the temperature data is above the predetermined threshold and if a turn-on request has been received; and

Applicant : James R. Cole et al.
Patent No. : n/a
Issued : n/a
Serial No. : 10/629,065
Filed : 07/28/2003
Page : 9

Attorney's Docket No.: 200208981-1
Alt. Ref.: 00116-001100000

turn on the light source if the temperature data is at or below the predetermined threshold
and if a turn-on request has been received.

32. (Currently Amended) A computer program product for controlling a digital projector,
tangibly stored on a computer-readable medium, comprising instructions operable to cause a
programmable processor to:

turn on a cooling device and keeping the light source off if the temperature data is above
the predetermined threshold and if a turn-on request has been received;

turn on the light source if the temperature data is at or below the predetermined threshold
and if a turn-on request has been received;

display images with the digital projector using a light-source;

receive a request to turn off the digital projector;

turn off the light-source in response to the request received; and

turn off a cooling device in response to the request and within a substantially immediate
time frame without consideration of the light-source temperature.